IN THE CLAIMS:

Please amend Claims 1, 2, 4, 5, 9, 11, 12, 18, 19, 20 and 22, as follows.

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1. (Currently Amended) A diffractive optical element, comprising:

a diffractive grating portion having a pair of diffractive gratings, said pair of diffractive gratings differing in dispersion from each other, and said pair of diffractive gratings confronting each other through a space of a refractive index of 1,

wherein a maximum optical path length difference occurring in ~~the~~ said diffractive grating portion ~~said pair of diffractive gratings~~ with respect to each of at least two wavelengths is m (integer) times the wavelength, and values of m in the two wavelengths are the same.

2. (Currently Amended) A diffractive optical element, comprising:

a diffractive grating portion having a pair of diffractive gratings, said pair of diffractive gratings differing in dispersion from each other, and said pair of diffractive gratings confronting each other through a space of a refractive index of 1,

wherein a maximum optical path length difference occurring in ~~the~~ said diffractive grating portion ~~said pair of diffractive gratings~~ with respect to each of at least two wavelengths is m integer times the wavelength, and values of m in the two wavelengths are the same, and peak portions and valley portions of said pair of diffractive gratings are formed in a chamfered shape.

3. (Canceled)

4. (Currently Amended) A diffractive optical element, comprising:

a diffractive grating portion having a pair of diffractive gratings, said pair of diffractive gratings differing in dispersion from each other, and said pair of diffractive gratings confronting each other through a space of a refractive index of 1,

wherein a maximum optical path length difference occurring in ~~the~~ said diffractive grating portion ~~said pair of diffractive gratings~~ with respect to each of at least two wavelengths is m (integer) times the wavelength, and values of m in the two wavelengths are the same, and peak portions of said pair of diffractive gratings are formed in a chamfered shape.

5. (Currently Amended) A diffractive optical element, comprising:

a diffractive grating portion having a pair of diffractive gratings, said pair of diffractive gratings differing in dispersion from each other, and said pair of diffractive gratings confronting each other through a space of a refractive index of 1,

wherein a maximum optical path length difference occurring in ~~the~~ said diffractive grating portion ~~said pair of diffractive gratings~~ with respect to each of at least two wavelengths is m (integer) times the wavelength, and values of m in the two wavelengths are the same, and valley portions of said pair of diffractive gratings are formed in a chamfered shape.

6-8. (Canceled)

9. (Currently Amended) A diffractive optical element, comprising:

a diffractive grating portion having a pair of diffractive gratings, said pair of diffractive gratings differing in dispersion from each other, and said pair of diffractive gratings confronting each other through a space of a refractive index of 1,

wherein a maximum optical path length difference occurring in ~~the~~ said diffractive grating portion ~~said pair of diffractive gratings~~ with respect to each of at least two wavelengths is m (integer) times the wavelength, and values of m in the two wavelengths are the same, peak portions of one of said pair of diffractive gratings are formed in a chamfered shape, and valley portions of the other of said pair of diffractive gratings are formed in a chamfered shape.

10. (Canceled)

11. (Currently Amended) A diffractive optical element according to Claim 1, ~~for diffracting light of a specific order with a high diffraction efficiency, comprising:~~

~~a diffractive grating portion having a pair of diffractive gratings, said pair of diffractive gratings differing in dispersion from each other, and said pair of diffractive gratings confronting each other through a space of a refractive index of 1,~~

~~wherein a maximum optical path length difference occurring in said pair of diffractive gratings with respect to each of at least two wavelengths is m (integer) times the wavelength, and values of m in the two wavelengths are the same,~~ wherein said optical element is for diffracting light of a specific order and said integer is the number of said specific order.

12. (Currently Amended) A blazed type diffractive optical element, comprising:

G1 Cont'd

a diffractive grating portion having a pair of diffractive gratings, said pair of diffractive gratings differing in dispersion from each other, and said pair of diffractive gratings confronting each other through a space of a refractive index of 1,

wherein a maximum optical path length difference occurring in ~~the~~ said diffractive grating portion light passing through said pair of diffractive gratings with respect to each of at least two wavelengths is m (integer) times the wavelength, and values of m in the two wavelengths are the same.

13. (Previously Presented) An optical system, comprising:

a diffractive optical element according to one of claims 1, 2, 4, 5, 9, 11 and 12; and

a lens system.

14. (Previously Presented) An optical system according to claim 13, wherein each of said at least two wavelengths are within a visible range.

15. (Previously Presented) An optical system according to claim 13, wherein one of said pair of diffraction gratings is made of resin.

16. (Previously Presented) An optical system according to claim 13, wherein each of said pair of diffraction gratings are made of resin.

G1 Cont'd

17. (Previously Presented) An optical system according to claim 13, wherein said optical element corrects chromatic aberration in said lens system.

18. (Currently Amended) An optical system, comprising: a diffractive optical element according to any one of claims 2, 4, 5 and 9; and

a lens system,

wherein ~~each of said pair of diffractive gratings comprises~~ said portions forming the chamfered shape are each formed as a flat surface, and a length a of said flat surface in a direction of grating arrangement of each diffractive grating is $0.5\ \mu m < a < 2\ \mu m$.

19. (Currently Amended) An optical system, comprising:

a diffractive optical element according to any one of claims 2, 4, 5 and 9; and

a lens system,

wherein ~~each of said pair of diffractive gratings comprises~~ said portions forming the chamfered shape are each formed as a curved surface, and a radius of curvature r of said curved surface on a cross sectional plane including a direction of grating arrangement of each diffractive grating is $0.5\ \mu m < r < 2\ \mu m$.

20. (Currently Amended) A diffractive optical element, comprising:

a diffractive grating portion having a plurality of diffractive grating layers laminated with a space layer of refractive index of 1, said plurality of diffractive grating layers differing in dispersion from each other,

wherein a maximum optical path length difference occurring in said diffractive grating portion with respect to at least two wavelengths ~~in said diffractive grating portion~~ is m (integer) times the wavelength, and values of m in the two wavelengths are the same.

21. (Previously Presented) A diffractive optical element, comprising:

a diffractive grating portion having a plurality of diffractive grating layers laminated with a space layer of refractive index of 1, said plurality of diffractive grating layers differing in dispersion from each other,

wherein said diffractive grating portion is formed on a light transmitting surface of a lens.

22. (Currently Amended) A diffractive optical element, comprising:

a diffractive grating portion having a plurality of diffractive grating layers laminated with a space layer of refractive index of 1, said plurality of diffractive grating layers differing in dispersion from each other,

wherein said diffractive grating portion is formed on a light transmitting surface of a lens, and a maximum optical path length difference occurring in said diffractive grating portion with respect to at least two wavelengths ~~in said diffractive~~

G1 Concl'd

~~grating portion~~ is m (integer) times the wavelength, and values of m in the two wavelengths are the same.